# TYPES OF NEOTROPICAL THECLINAE (LYCAENIDAE) IN THE MUSÉUM NATIONAL D'HISTOIRE NATURELLE, PARIS

## KURT JOHNSON

Department of Entomology, American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024

ABSTRACT. Specimens marked as types are examined critically for the first time. Sixty primary types of Lathy, four of Draudt, and two of Blanchard are documented. Lectotypes are designated for Lathy binomials Thecla draudti, inconspicua, lilacina, tagyroides, and Trichonis immaculata; and Lathy trinomials Thecla ambrax septentrionalis, cyllarus reducta, linus paraguayensis, l. separata, phoster parvipuncta, rocena major, strephon occidentalis, Eumaeus minijas obsoleta, m. peruviana, and Theclopsis eryx occidentalis. Lathy junior primary homonyms described in Thecla-inornata, mirabilis, violacea, and viridis—are replaced, respectively, with lathyi, rhaptissima, magnapurpurata, and familiaris. The name pentas Nicolay (Symbiopsis) is recognized as replacing Lathy junior primary homonym Thecla peruviana. Five Lathy specimens are invalidated as types. Types of three Lathy taxa were not found. Four primary types of Draudt are documented. Lectotypes are designated for Thecla catharina, crispisulcans, and quassa. Five primary types of Godart—Polyommatus bazochii, falacer, irus, megarus, and strophius—are discussed, along with a possible type of P. damastus. Five specimens marked as types of Druce, Hewitson, or Staudinger are invalidated. Types of recent authors at MNHN are cite-referenced and a guide to specimen locations at MNHN provided. Eighteen types not previously illustrated are figured along with fifteen other selected types and one specimen of questionable status.

Additional key words: Eumaeini, systematics, taxonomy.

Types of neotropical Theclinae at the Muséum National d'Histoire Naturelle (MNHN) have been poorly known. Many were described without illustration and the uncertain status of others has complicated both early and recent taxonomic work (Draudt 1917–24 [1921], Comstock & Huntington 1958–64, Miller & Brown 1981, Nicolay 1982, Robbins 1986, Bridges 1988). At the MNHN in 1981, 1985, 1987, and 1989 I was able to survey type material of neotropical Theclinae and prepare a definitive list, allowing not only enumeration and illustration of types but specification of appropriate lectotypes, replacement names, and instances of invalid usage or incorrect marking of specimens.

Recently, C. A. Bridges (1988) cited certain information from a 1987 draft of this paper. Where such citations differ from the present work, the latter should be considered authoritative.

## MNHN PRIMARY TYPE SPECIMENS

Collections. Butterfly holdings at the MNHN are separated into three primary collections: the Fournier Collection, the General Collection (term from G. Bernardi, pers. comm.), and the Supplemental Collection (my term).

The Fournier Collection, housed in locked cabinets in a special room

(the "Fournier room"), includes 96 Cornell size drawers of neotropical Theclinae. No diagram is available for layout of the collection; neotropical Theclinae are located on the upper south face of the central row of tall cabinets and on the upper west face of the west wall cabinets.

The General Collection is housed in numerous rooms at the MNHN. Neotropical Theclinae of the General Collection are found in 106 glasstopped boxes stored on shelves facing the upper west wall of the room immediately west of the Fournier room. These specimens are unsorted and the individual boxes are moved around frequently.

In recent years new accessions have been placed aside the General Collection in the same room(s) as the General Collection, but not fully incorporated. Hereafter, these non-integrated collections are referred to as the Supplemental Collection. Concerning neotropical Theclinae, the largest of these collections are labelled as donations of Doubles, Herbulot, Stempffer, and Zerkowitz. The Stempffer Collection contains substantial numbers of neotropical Theclinae, most of which are unidentified. Neotropical Theclinae in the Supplemental Collection generally are located on shelves on the east wall of the room directly west of the Fournier room.

Type specimens. The largest number of MNHN type specimens, and those most obviously marked, are of Percy I. Lathy in the Fournier Collection. These types bear a characteristic label written by Lathy in dark ink on rectangular white labels attached to the specimen pins. These labels read either "Specimen Typicum [and name]" or "Spec. Typicum [and name]", depending on the length of the associated binomen. In addition, Lathy placed a separately pinned label, typeset in upper case, reading "TYPE" adjacent to most of these type specimens. Lathy also placed such "voucher" labels next to specimens he considered to be types of other authors. Of these, certain specimens marked as types of Max Draudt appear valid, considering their label data and what is known of purchase sources for Fournier material (G. Lamas, pers. comm.). Other specimens marked as types are questionable. Of these, certain specimens purported to be types of H. H. Druce, W. C. Hewitson, and O. Staudinger appear to be invalid (see below).

Type specimens in the General Collection usually bear, in addition to original labels, a round green label affixed by MNHN staff. On this label is inscribed, in black india ink, the particular type designation. These specimens are not segregated except in cases where a special drawer has been created by MNHN staff or by a visiting specialist. Segregated types (now in the care of Jacques Pierre, Curator) include types of J. B. Godart and C. E. Blanchard. Types of recent authors are found in drawers within the General Collection, which I have marked as noted below.

### ANNOTATED LIST OF MNHN TYPES

Format. Types are reviewed by collection and author with lists under each author in alphabetical order of the terminal names. Label data on types are recorded verbatim, as read by me. Unclear label data, as deciphered, is noted by a subsequent parenthetical "(?)". Where a knowledgeable reviewer has suggested a probable translative meaning for unclear label data, this opinion is placed in adjoining brackets with the source credited. Undecipherable labels are noted as such. Brackets are also used for incidental notes by me (e.g., [sic], etc.). Differences in various authors' label formats are summarized in introductory comments concerning each author. Original descriptions are cited in standard abbreviated format. Annotations (following the heading "Note:") treat (i) discrepancies between original descriptions ("OD"'s) and extant label data concerning the type locality ("TL") and/or (ii) specific taxonomic comments. Lectotype designations and new replacement names are in bold face. All lectotypes designated bear a label "Lectotype by Kurt Johnson, J. Lepid. Soc., 1991". An evaluation of status has been made for each MNHN specimen labelled as a type. However, because it is possible that a first reviser may discover additional information, no labels have been removed and lists are provided below of specimens judged not to be valid types. Illustrations are provided as explained in the "Format Notes" under each author. Forewing lengths (FWL) measured from base to apex are provided for type specimens not measured in OD's and for specimens illustrated here.

## **Fournier Collection**

## Author: Percy I. Lathy

Format notes. The list is divided by status of types into three categories: (1) valid names, (2) homonyms and replacement names, and (3) specimens invalidated as types. The standard Lathy type label, "Specimen Typicum, [name]" is abbreviated below as "s.t., etc." and Fournier drawer numbers noted as "FD #". Lathy did not illustrate all types. Some species described in 1926 were illustrated in 1930 (Plate IX) but it is not certain that the individuals figured then were types (see Note under *Thecla tristis*). Thus, I illustrate with few exceptions (noted as "photograph not available") type specimens not illustrated in OD's, along with certain lectotypes and types of replacement names. Lathy sometimes listed all the specimens he viewed for a particular taxonomic description (see Lathy 1926). Thus, according to the Code of the International Commission on Zoological Nomenclature (ICZN Code) all of these specimens could be construed as syntypes. However, though not always indicated in publication, Lathy also labeled one specimen

(or two—when both sexes were available) as primary type(s). For consistency, I have always chosen one of these as lectotype and, conforming to MNHN procedures, considered the remaining primary type as a paralectotype.

#### CATEGORY 1. Valid Names:

albolineata: holotype male, *Thecla albolineata* Lathy 1936:230 (pl. 8, fig. 5), label data: "s.t., etc., ex. coll. Brabant, type male, Rio Aquatal (?) [Rio Aguacatal, Valle del Cauca, Colombia: G. Lamas, pers. comm.], Nov. 08". FD 409.

bouvieri: holotype male, Thecla bouvieri Lathy 1936:231 (pl. 8, fig. 13), label data: "s.t., etc., "Ecdr [probably = "Ecuador" of OD], ex Grose Smith, 1910". FD 401.

cinerea: holotype male, Thecla cinerea Lathy 1936:231 (pl. 8, fig. 11), label data: "s.t.,

etc., Rio Grande". Note: locality of OD is "Rio Grande do Sul" [Brazil]. FD 388.

cuprea: holotype male, Thecla cuprea Lathy 1930:134 (pl. 9, fig. 6), label data: "s.t.,

etc., Macas-Ecuador, 1905-6". FD 354.

decorata: holotype male, Lamprospilus decorata Lathy 1926:47, label data: "s.t., etc.,

Oxapampa, Peru". FD 423. Fig. 1 (FWL = 18 mm).

decyanea: holotype female, Lamprospilus azaria ab. decyanea Lathy 1932:182, label data: "s.t., etc., Petropolis [Brazil: OD], 5/2/73, ex. Coll. Monteiro". FD 423. Fig. 2 (16 mm).

demilineata: holotype male, Thecla demilineata Lathy 1936:231 (pl. 8, fig. 16), label data: "s.t., etc., Arojo (?) [probably Arroyo], Paraguay, 6/11/1926, ex. C. S. Larsen coll."

Note: specimen data of OD is only "Paraguay". FD 388.

dicaeoides: holotype female, *Thecla dicaeoides* Lathy 1936:229 (pl. 8, fig. 1), label data: "s.t., etc., Uboveva (?) [probably "Mbovevo": G. Lamas, pers. comm.], Paraguay, 2/11/1926, ex. C. S. Larsen coll." Note: specimen data of OD is only "Paraguay". FD 416.

draudti (a): holotype male, Lamprospilus draudti Lathy 1932:181, label data: "s.t., etc., Nov. '08, Rio Aquatal (?) [Rio Aguacatal, Valle del Cauca, Colombia: G. Lamas, pers.

comm.]". Note: OD adds "1800 m.". FD 423. Fig. 3 (FWL = 14 mm).

draudti (b): lectotype male, paralectotype female, Thecla draudti Lathy 1926:40, label data: male—"s.t., etc., "Bogota, Colombie", female—"s.t., etc., Colombie". Note: OD says TL "Colombia and Central America". FD 351. Fig. 29 (FWL = 21 mm, lectotype).

drucei: holotype male, Thecla drucei Lathy 1926:41, label data: "s.t., etc., Brésil-etat

de Ste. Catherine [sic]". FD 364. Fig. 26 (FWL = 23 mm).

dubiosa: holotype female, Thecla dubiosa Lathy 1936:232 (pl. 8, fig. 20), label data: "s.t., etc.", no other data. Note: OD notation of TL as "Patria ignota" could be construed literally from Latin as "origin unknown" (Marchant & Charles 1956); however, it should also be noted that in cross-references of the physical feature "hills" in U.S.B.G.N. (1961–68 [1961c, 1964, 1968]) names beginning with "Patri-", and possibly originating from that Latin root [meaning "source" (Marchant & Charles 1956)?], are listed for Mexico, Colombia and Argentina. FD 418.

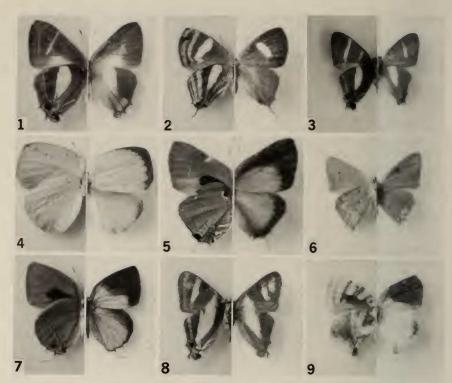
elegans: holotype male, *Thecla elegans* Lathy 1936:230 (pl. 8, fig. 4), label data: "s.t., etc., F. Soiade (?) [probably Schade, a collector: G. Lamas, pers. comm.], Paraguay, Arojoquasi (?) [Arroyo Guazú: G. Lamas, pers. comm.], 16/11/1926". Note: specimen

data of OD is only "Paraguay". FD 416.

gloriosa: holotype male, *Thecla gloriosa* Lathy 1930:134 (pl. 9, fig. 5), label data: "s.t., etc.", no other data. Note: locality of OD is "Chocó, Rio Micai-Joly [sic], Colombia". OD

adds specimen date "23V-18VI, 1924, collector Werner Hopp". FD 354.

immaculata: lectotype male, *Trichonis immaculata* Lathy 1930:133, label data: "s.t., etc., ex. Coll. Monteiro". Note: Robbins (1986:144) presumed this specimen and a reputed Natural History Museum, London (NHM), syntype as extant. Searches of the NHM by me, P. Ackery (NHM) (pers. comm.), L. D.and J. Y. Miller (Allyn Museum of Entomology, University of Florida) (AME) (J. Miller, pers. comm.), and J.N. Eliot and P. Ackery using correspondence from Robbins (P. Ackery, J. N.Eliot, pers. comm.) have failed to locate



FIGS. 1-9. Wing upper surface (ups), right, and under surface (uns), left, of selected MNHN types. 1, Lamprospilus decorata Lathy, holotype. 2, L. azaria ab. decyanea Lathy, holotype. 3, L. draudti Lathy, holotype. 4, Trichonis immaculata Lathy, lectotype. 5, Thecla rocena major Lathy, lectotype. 6, T. eurytulus nigra Lathy, holotype. 7, Theclopsis eryx occidentalis Lathy, lectotype. 8, Lamprospilus nicetus ochracea Lathy, holotype. 9, Thecla dolylas pallida Lathy, holotype.

a NHM syntype. Thus, I designate the MNHN specimen as the lectotype. It differs from Robbins' characterization of the species by being unicolorous on the hindwing under surface. However, there is also evidence this surface has been repaired. OD gives no TL. FD 343. Fig. 4 (FWL = 17 mm, lectotype).

inconspicua: lectotype male, Thecla inconspicua Lathy 1930:136 (pl. 9, fig. 15), label

data: "s.t., etc., Petropolis [Brazil], 94:169, 28-8-73".

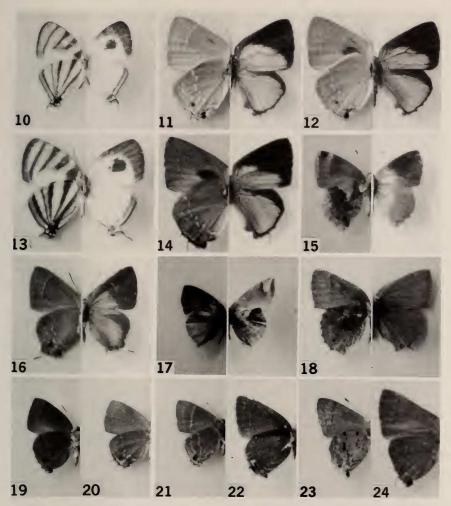
larseni: holotype male, Thecla larseni Lathy 1936:230 (p. 8, fig. 7), label data: "s.t., etc., Mendoza 28/12 1906, Argentina, Coll. C. S. Larsen, Faaborg". Note: OD states holotype is female; dissection indicates it is male (Johnson 1990a, in treatment of generic placement of this species, noted that dull wing coloration complicates superficial sex recognition). Fig. 24 (FWL = 13 mm). FD 420.

lilacina: lectotype male, paralectotype male [marked "female" by Lathy], Thecla lilacina Lathy 1930:136 (pl. 9, Fig. 13), label data (both): "s.t., etc., Petropolis [Brazil],

27-2-74". FD 401.

lineata: holotype male, *Thecla lineata* Lathy 1936:231 (pl. 8, fig. 14), label data: "s.t., etc., Balzapamba, Ecuador, C. S. Larsen coll.". Note: OD states holotype is female; dissection indicates it is male. FD 407.

maculata: holotype male, allotype female, Thecla maculata Lathy 1936:230 (pl. 8, fig. 8), label data: male—"s.t. etc., Huancabamba, Peru, Carl Zacher [collector]", female—



FIGS. 10-24. Selected MNHN types and other specimens continued (10-18, format as in Figs. 1-9, H = homonym, R = replacement). 10, Thecla linus paraguayensis Lathy, lectotype. 11, T. phoster parvipuncta Lathy, lectotype. 12, T. cyllarus reducta, lectotype. 13, T. linus separata Lathy, lectotype. 14, T. cyllarus ab. xanthica Lathy, holotype. 15, Thecla commodus viridis Lathy (H, R = familiaris Johnson), holotype. 16, T. catharina Draudt, lectotype. 17, Polyommatus bazochii Godart, holotype. 18, P. irus Godart, holotype. (19-24), under surfaces of taxa with generally concolorous upper surfaces. 19, Thecla ortaloides Lathy, holotype. 20, Thecla peruviana Lathy (H, R = pentas Nicolay), holotype. 21, Thecla tristis Lathy, holotype. 22, Polyommatus falacer Godart, holotype. 23, P. megarus Godart, holotype. 24, P. strophius Godart, holotype.

"s.t., etc., Sao P. d'Olivenca, 22 March". FD 381. Note: in OD Lathy departed from his earlier practice and specifically noted respective holotype and allotype.

major: lectotype male, paralectotype male [marked "female" by Lathy], Thecla rocena major Lathy 1926:42, label data (both): "s.t., etc., Muzo, Colombia". FD 382. Fig. 5 (FWL = 18 mm, lectotype).

nigra: holotype male, Thecla eurytulus nigra Lathy 1926:46, label data: "s.t., etc., Tucuman, 9-6-22". Note: locality of OD is "Tucuman, Argentina"; the status of nigra

was recently revised by Johnson et al. 1990. FD 417. Fig. 6 (FWL = 12 mm).

obliterata: holotype female, Thecla obliterata Lathy 1936:230, label data: "s.t., etc., Pampas, 3000 m., Peru". Note: taxon omitted by Comstock and Huntington (1958–64) [1961, 1962] by editorial error omitting all citations before "ocr . . .". FD 371. Photograph not available.

obsoleta: lectotype male, paralectotype male [marked "female" by Lathy], Eumaeus minyas [=minijas] obsoleta Lathy 1926:39, label data (both): "s.t., etc., Bolivia, Prov. de Sara, C. Bolivia". Note: taxon omitted by Comstock and Huntington (1958–64) [1961, 1962] by editorial error omitting all citations before "ocr . . .". FD 338. Fig. 30 (FWL = 28 mm, lectotype).

occidentalis (a): lectotype male, paralectotype female, Thecla strephon occidentalis Lathy 1926:44, label data (both): "s.t., etc., Rio Tono, Peru, 1,200 ft., Watkins". Note: taxon omitted by Comstock and Huntington (1958–64) [1961, 1962] by editorial error omitting all citations before "ocr . . .". FD 396. Fig. 32 (FWL = 20 mm, lectotype).

occidentalis (b): lectotype male, paralectotype female, Theclopsis eryx occidentalis Lathy 1926:47, label data (both): "s.t., etc., Rio Tono, Peru, 1,200 ft., Watkins". Note: taxon omitted by Comstock and Huntington (1958-64) [1961, 1962] by editorial error omitting all citations before "ocr . . .". FD 423. Fig. 7 (FWL = 16 mm, lectotype).

ochracea: holotype male, Lamprospilus nicetus ochracea Lathy 1932:182, label data: "s.t., etc., 32.21 ex Dognin 1921, Loja, Equiteur (?) [Equateur = Ecuador] 1886" plus three undecipherable notation labels. Note: taxon omitted by Comstock and Huntington (1958–64) [1961, 1962] by editorial error omitting all citations before "ocr . . .". FD 423. Fig. 8 (FWL = 15 mm).

ortaloides: holotype male, Thecla ortaloides Lathy 1930:135 (pl. 9, fig. 12), label data: "s.t., etc., Petropolis [Brazil], 10-2 '76". Note: refigured because OD fig. shows under surface medial band continuous. FD 389. Fig. 19 (FWL = 12 mm).

pallida: holotype male, Thecla dolylas pallida Lathy 1930:135, label data: "s.t., etc., Hab? [sic]", no other data. Note: OD has no TL. FD 377. Fig. 9 (FWL = 13 mm).

paraguayensis: lectotype male, Thecla linus paraguayensis Lathy 1926:42, label data: "s.t., etc., Patino, Paraguay, C. S. Barnes". Note: aside lectotype male (with specimen type label reading "paraguayana") Lathy pinned his standard label "TYPE"; additional 11 male syntypes of OD were not specifically marked. FD 373. Fig. 10 (FWL = 13 mm). parvipuncta: lectotype male, paralectotype female, Thecla phoster parvipuncta Lathy

parvipuncta: lectotype male, paralectotype female, Thecla phoster parvipuncta Lathy 1926:44, label data (both): "s.t., etc., Rio Tono, C. Peru, 1,200 ft., Watkins". FD 397. Fig. 11 (FWL = 19 mm).

peculiaris: holotype male, *Thecla peculiaris* Lathy 1930:136 (pl. 9, fig. 14), label data: 's.t., etc., Petropolis, Brazil, 11-x-1875''. FD 401.

peruviana: lectotype female, Eumaeus minyas [=minijas] peruviana Lathy 1926:39, label data, "s.t., etc., Chanchamayo, C. Peru". Note: for Thecla peruviana Lathy 1936 see invalid names (Category 3). Concerning E. m. peruviana, aside lectotype female Lathy pinned his standard label "TYPE"; additional 20 female and 32 male syntypes of OD were not specifically marked. Photograph not available. FD 355.

reducta: lectotype male, Thecla cyllarus reducta Lathy 1926:44, label data: "s.t., etc., Rio Tono, C. Peru, 1,200 ft., Watkins". Note: aside lectotype male Lathy pinned his standard label "TYPE"; additional 6 male syntypes of OD were not specifically marked.

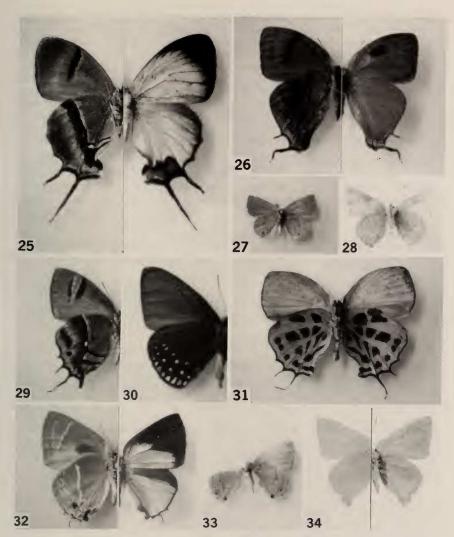
FD 397. Fig. 12 (FWL = 20 mm).

restricta: holotype male, Thecla restricta Lathy 1936:230 (pl. 8, fig. 9), label data: "s.t. etc., Salta, N. Argentina, iv-vi 1921". Note: a companion female with identical data is

also marked as a type but OD is from a holotype male. FD 371.

separata: lectotype male, paralectotype female, *Thecla linus separata* Lathy 1926:42, label data: "s.t., etc.", no other data. Note: locality of OD includes "Rio Tono" and "Chanchamayo" (both noted as in "Peru") and "Matto Grosso" [Brazil]. FD 373. Fig. 13 (FWL = 17 mm, lectotype).

septentrionalis: lectotype male, Thecla ambrax septentrionalis Lathy 1926:44, label data: "s.t., etc., Muzo, Colombie". Note: second syntype male (label data "Chontales,



FIGS. 25-33. Selected MNHN types and other specimens continued. 25, ups right, uns left, *Thecla coronata watkinsi* Lathy, holotype. 26, format as above, *T. drucei* Lathy, holotype. 27, uns, both wings, *T. crispisulcans* Draudt, lectotype. 28, uns, both wings, *Thecla americensis* Blanchard, lectotype. 29, uns, *Thecla draudti* Lathy, lectotype. 30, uns, *Eumaeus minyas* [sic] *obsoleta* Lathy, lectotype. 31, uns, both wings, *Thecla mirabilis* Lathy (H, R = *rhaptissima* Johnson), holotype. 32, ups right, uns left, *T. strephon occidentalis* Lathy, lectotype. 33, uns, both wings, *Polyommatus damastus* Godart, possible holotype. 34, ups right, uns left, *Thecla larseni* Lathy, holotype.

Nicaragua") is at NHM (personal examination and Bridges 1988); OD does not explicitly state TL; contrary to usual Lathy practice (see Discussion), TL does not specify deposition of types. Considering the OD and label data, I and G. Lamas (pers. comm.) consider the above specimens as original syntypes. FD 398. Photograph not available.

tagyroides: lectotype male, paralectotype female, *Thecla tagyroides* Lathy 1930:134 (pl. 9, fig. 7), label data: "s.t., etc., Bas Maroni, Guyane Francaise". FD 354.

talboti: holotype male, Thecla talboti Lathy 1936:232 (pl. 8, fig. 18) label data: "s.t.,

etc., S. Blas [sic], Paraguay, 12-1926, ex. C. S. Larsen coll.". FD 389.

trinitatis: holotype female, Thecla trinitatis Lathy 1936:232 (pl. 8, fig. 19), label data: "s.t., etc., "Caparo, W. Cent. Trinidad, F. Birch". Note: OD states holotype is male; dissection indicates it is female. TL of OD cited "Trinité". FD 418.

tristis: holotype male, Thecla tristis Lathy 1926:45, label data: "s.t., etc., Nivac, Matto Grosso, Brazil". Note: variance between this specimen and 1930 figure (Plate IX, 16) led me to doubt that the four individuals of this plate with 1926 OD's necessarily represented the types. All are refigured (see L. decorata, T. draudti, T. drucei). FD 407. Fig. 21 (FWL = 14 mm).

variegata: holotype male, *Thecla variegata* Lathy 1936:231 (pl. 8, fig. 12), label data: "s.t., etc., Santa Fe de Bogota". Note: locality of OD is "Bogota, Colombie". FD 388. watkinsi: holotype female, *Thecla coronata watkinsi* Lathy 1926:39, label data: "s.t.,

etc., Pichis Rd., Peru, 1800 ft., xi-xii '19, C. Watkins'. FD 349. Fig. 25 (FWL = 48 mm). xanthica: holotype male, Thecla cyllarus ab. xanthica Lathy 1926:44, label data: "s.t., etc., Bas [="Lower" of OD] Maroni [French Guiana]". FD 397. Fig. 14 (FWL = 20 mm). xoremoides: holotype male, Thecla xorema xoremoides Lathy 1936:231 (pl. 8, fig. 15), label data: "s.t., etc. Villarrica, Paraguay, 11-1924, ex. C. S. Larsen coll.". Note: Specimen data of OD is only "Paraguay". Hyphenated "xorema-xoremoides" combination of OD has confused status of each name under ICZN Code (C. Bridges, pers. comm.); G. Lamas (pers. comm.) suggests best construing intention of Lathy as latter name being subspecies of former. I find this view consistent with wing and morphological fascies of each taxon (Thecla xorema Schaus, TL Castro, Parana, Brazil, holotype National Museum of Natural History, Smithsonian Institution). FD 389.

## CATEGORY 2. Junior Primary Homonyms and Replacement Names:

Five Lathy names constitute junior primary homonyms and require replacement names according to sections 59 and 60 of the ICZN Code.

inornata: holotype female, Thecla inornata Lathy 1936:229 (pl. 8, fig. 3), label data: "s.t., etc., R. Grande". Note: invalid homonym of Thecla inornata Verity (1911). A replacement name is needed (Bridges 1988) for which I propose lathyi, referring to OD cited above and designating OD's holotype female as holotype of the new name. OD states holotype is male; dissection indicates it is female. Etymology refers to Lathy's original description of the taxon. TL of OD is "Rio Grande do Sul, Brazil". FD 416.

mirabilis: holotype male, Thecla mirabilis Lathy 1930:135 (pl. 9, fig. 8), label data: "s.t., etc., Rio Pastazza [sic], Ecuador". Note: invalid homonym of Thecla mirabilis Erschoff (1874). A replacement name is needed (Bridges 1988) for which I propose rhaptissima, referring to OD cited above and designating OD's holotype male (Fig. 31, 23 mm) as holotype of the new name. Etymology means "greatly speckled" and refers to

the under surface wing pattern. OD adds "Eastern" to Ecuador TL. FD 351.

peruviana: holotype female, Thecla minyas [=minijas] peruviana Lathy 1936:229 (pl. 8, fig. 2), label data: "s.t., etc., Chanchamayo, C. Peru". Note: invalid homonym of Thecla peruviana Erschoff (1876). A replacement name is not needed since Nicolay (1971) described Symbiopsis pentas and study of its types (Carnegie Museum of Natural History) indicates it and peruviana Lathy (Fig. 20) are the same species. Based on this synonymy, pentas Nicolay replaces peruviana Lathy 1936 [not peruviana Lathy 1926, which was described in Eumaeus (see Category 1, above)]. FD 416.

violacea: holotype male, Thecla violacea Lathy 1936:230 (pl. 8, fig. 6), label data: "s.t., etc., Abuna, Amazons, Oct. 15, 1929". Note: invalid homonym of Thecla quercus var. violacea Niepelt (1914). A replacement name is needed (Bridges 1988) for which I propose magnapurpurata, referring to the OD cited above and designating OD's holotype male as holotype of the new name. Etymology refers to the purplish coloration noted originally

by Lathy. OD specimen data is only "Amazon." FD 405.

viridis: holotype male, Thecla commodus viridis Lathy 1930:135, label data: "s.t., etc. [but as "Thecla viridis"], Ex. Coll. Monteiro". Note: invalid homonym of Thecla viridis Edwards (1862). Dissection of viridis holotype indicates it is a species distinct from commodus (syntypes, NHM); I propose the replacement name familiaris for the Lathy taxon, referring to the OD cited above and designating OD's holotype male (Fig. 15, 15 mm) as holotype of the new name. Etymology denotes the common occurrence of this generally Andean butterfly. OD suggests "Bolivia" as TL. FD 375.

## CATEGORY 3. Specimens Invalidated as Types:

FD's 355-356 contain a number of specimens of the genus Eumaeus labelled as types but for which there are no known descriptions. The species names attached to these specimens are invalid and noted here only as "x". This list is provided because the species names used by Lathy duplicate others he applied validly in other genera. None of these specimens is a type:

- (1) a male, label data: "s.t. Eumaeus "x" Lathy, Iquito [sic], Amazon, iii-iv '30", FD 355:
- (2) a male, label data: "s.t. Eumaeus "x" Lathy, S. Andaeas [sic], Ecuador", FD 355; (3) a male and female, label data: "s.t. Eumaeus "x" Lathy [male] Huigra, W. Ecuador, 3000 ft., 15 Febr." [female] Huigra, W. Ecuador, 3000 ft., 16 Febr. 1913, A. Hall";

  - (4) a female, label data "s.t. Eumaeus "x" Lathy, R. Grande";
    (5) a male, label data: "s.t. Eumaeus "x" Lathy, Rio Chili, Colombia, xii-'20".

#### Author: Max Draudt

Format notes. Numerous Draudt types have been of uncertain location since World War II and generally considered destroyed (Kiriakoff 1948). Bridges (1988) suggested the Naturhistorisches Museum. Basel. Switzerland as a possible depository but such specimens have not been found (G. Lamas, pers. comm.). Gerardo Lamas recently located Draudt types in Europe and will report soon on this important discovery. Following from this, and knowledge of historical purchases of material by Fournier, Lamas (pers. comm.) construes the following MNHN specimens labelled as types of Draudt to be authentic. Since label format on Draudt types varies, entries below are formatted according to the various labels with remarks immediately following.

## CATEGORY 1. Valid Names:

catharina: lectotype male, paralectotype male, Thecla catharina Draudt 1917-24 [1920]:(Vol. 5) 788 (pl. 156, fig. k), label data: lectotype—handwritten red label "type", Lathy voucher label and "Timbo, Blumenau, St. Catharina [sic], Modt. 11/8/27, af H. Kotzsch, Dresden-Blasewitz, ex. C. S. Larsen coll."; paralectotype—same, but no specific mention of "Timbo, Blumenau". Note: G. Bernardi (pers. comm.) indicates that on Larsen Collection labels, data following "Modt." (located on a second label line following collection data, if provided) includes data concerning purchase. Consistent with this observation, G. Lamas (pers. comm.) reports these specimens, and the types of subsequent entries, "were sold to Larsen by H. Kotzsch, from Dresden". The OD mentions only two syntype males; accordingly, Lamas (pers. comm.) notes that, based on label data above, report of a third syntype in Dresden and a fourth in São Paulo, Brazil (Lamas 1973:183)

is probably incorrect. Because of the previously unclear status of Draudt types since World War II, recent revisionary work including catharina noted purported MNHN syntypes but did not designate a lectotype (Johnson 1990a). FD 407. Fig. 16 (FWL = 15 mm).

crispisulcans: lectotype female, Thecla crispisulcans Draudt 1917-24 [1920]:(Vol. 5) 799 (pl. 158, fig. g), label data: red label "type", Lathy voucher label and "Timbo Blumenau, St. Catharina [sic]". FD 414. Fig. 27 (FWL = 10 mm).

quassa: lectotype male, Thecla quassa Draudt 1917-24 [1920]:(Vol. 5) 784 (pl. 156, fig. a), label data: red label "type", Lathy voucher label and "Timbo Blumenau, St. Catharina [sic]". FD 401. Photograph not available (FWL = 11 mm).

#### Other Authors

Certain Fournier Collection drawers contain specimens marked as types attributed to various authors but determined here as invalid. None of these specimens is a type:

(1) a female, FD 401, marked "TYPE" of Thecla vesper Druce (1909), label data: "Rio Tono, 1,200 ft., Watkins". Note: valid type (OD TL Chanchamayo, Peru) is at the NHM

(personal examination and Bridges 1988);

(2) a male, FD 423, marked "s.t., etc. Lamprospilis azaria" [Thecla azaria Hewitson (1863-78 [1867]], label data: "Itatiaya [Brazil], ix'24, 1000 m., coll E. May". Note: MNHN labels misattribute authorship to Lathy. Valid syntypes are at the NHM and lack locality labels [personal examination]; OD did not include TL (OD, Comstock & Huntington 1959, Bridges 1988);

(3) a male, FD 360, marked "s.t., etc. Thecla orsina" [Hewitson 1863-78 [1877]], label data: "Rio Tono, C. Peru, 1,200 ft., Watkins". Note: MNHN labels misattribute authorship

to Lathy. Valid type (OD TL Bolivia) is at the NHM;

(4) a male and female, FD 389, each marked "TYPE" of Micandra sapho Staudinger 1884-88:[(Vol. 1) 289 (Vol. 2, pl. 97)], label data: male—"Rio Micai"; female—"Kolumb., Chocó, Rio Micai [sic], Joly [sic] 23.5-18.6 1924, Werner Hopp". Note: valid type (OD TL Rio San Juan, Panama) is in Staudinger collection at Zoologisches Museum der Humbolt Universität zu Berlin (H. J. Hannemann, pers. comm.).

#### General Collection

## **Author:** Jean Baptiste Godart

Format notes. The list is divided by status of types into two categories: (1) extant type specimens and valid names and (2) reputed MNHN type specimens not located or of uncertain identity. Label data are appropriately noted as "handwritten" and/or "typeset". Photographs are as described above. G. Lamas and R. Robbins (pers. comm.) note additional Godart types may be at the MNHN. The list below includes all that could be located in consultation with P. Viette, G. Bernardi and I. Pierre (MNHN) and all presently included in the MNHN drawer segregated for Godart types under the care of I. Pierre.

## CATEGORY 1. Extant Type Specimens and Valid Names:

bazochii: holotype male, Polyommatus bazochii Godart 1819-24 [1824]:681, label data: handwritten: "T. Basochii [sic], God. [sic], thius, Hübn/ basochii Godt. type, Brésil, Delalande"; typeset: "Museum Paris, Brésil, Delalande". Note: this specimen had been judged a type by MNHN curators P. Viette and G. Bernardi (pers. comm.). Fig. 17 (FWL = 13 mm).

falacer: holotype male, *Polyommatus falacer* Godart 1819–24 [1824]:633, label data: handwritten: "Falacer God. [sic], type de Godart probable, (Strymon falacer)". Note: this specimen has been suggested as a probable type by MNHN curators P. Viette and G.

Bernardi (pers. comm.). Fig. 21 (FWL = 18 mm).

irus: holotype male, Polyommatus irus Godart 1819–24 [1824]:674, label data: handwritten: "P. Irus God. [sic] arsace Boisd. [sic]", "Incisalia irus Holotype det. by R. R. Gatrielle 1975, Allyn Museum Photo No. 0900975-A 13-14-15"; typeset: "Museum Paris, Polyommatus irus Godart, Encycl. méthod. p 674, no 177". Note: this specimen had been judged a type by MNHN curators P. Viette and G. Bernardi (pers. comm.). Fig. 18 (FWL = 16 mm).

megarus: holotype male, *Polyommatus megarus* Godart 1819–24 [1824]:638, label data: handwritten: "P. Megarus, God. [sic], echion, Linn., basalides [sic], Hübn., megarus, Godt. type"; typeset: "TYPE, Museum Paris". Note: this specimen had been judged a type by MNHN curators P. Viette and G. Bernardi (pers. comm.). The name *megarus* was previously considered a subjective synonym of *Tmolus basilides* (Geyer 1832–37 [1837]) (Bridges 1988); a new status and combination are documented for *P. megarus* in Johnson et al. (1990). Fig. 23 (FWL = mm).

strophius: holotype male, *Polyommatus strophius* Godart 1819–24 [1824]:632, label data: handwritten: "Strophius Godt. type, T. cerus, Boisd., Strepon, Fabr., Strophius God." [sic]; typeset: "Museum Paris, Brésil, Delalande, TYPE". Note: this specimen had been judged a type by MNHN curators P. Viette and G. Bernardi (pers. comm.). Fig. 24 (FWL

= 20 mm).

## CATEGORY 2. Reputed MNHN Type Specimens Not Located or of Uncertain Identity:

damastus and hugon: both described in Polyommatus by Godart (1819-24 [1824], p. 640 and with holotypes listed by Bridges (1988) and Miller and Brown (1981) as MNHN. Bridges (pers. comm.) followed Miller and Brown; Miller (pers. comm.) relied on correspondence from Viette and also borrowed one of the types (P. irus). The identifications of types listed by Viette for Miller were made by Viette (Miller, pers. comm.) and Bernardi communicated the same to R. K. Robbins (pers. comm.). According to the examination made by me and by Bernardi and Pierre in 1989, the type of hugon is not among Godart types segregated at MNHN. However, there is a specimen among the types (Fig. 33, FWL = 13 mm) that bears only the handwritten label "type de Godart probable". For the following reasons, this specimen may be the type listed by Viette as "P. damastus" in his correspondence with Miller. Although the specimen represents Hesperia cecrops Fabricius (1792-99 [1793]) (now placed in genus Calycopis Scudder [Field 1967, Bridges 1988]), because P. damastus was originally proposed as a replacement name for Papilio damon Stoll 1780-90 [1782], P. damastus (since Morris 1860) has been consistently considered a subjective synonym of Lycus gryneus Hübner 1816-26 [1819] (now placed in Mitoura Scudder [Bridges 1988]). Both cecrops and gryneus have orange under surface bands and colorful limbal areas; crude description or renderings of the two taxa could be easily confused. Thus, if the poorly labelled MNHN specimen is indeed the type of P. damastus, it is possible the identity of P. damastus has been hitherto misconstrued. It would constitute a synonym of H. cecrops, not L. gryneus. However, although this information is important to record, I see no objective way to decide the identity of this poorly labelled specimen.

## Author: Charles Emile Blanchard

#### CATEGORY 1. Valid Names:

americensis: lectotype male, paralectotype male *Thecla americensis* Blanchard (in Gay 1852: Vol. 7:38, pl. 3, fig. 10), label data (both): green type label, "T. americensis, Bl., 15/43 [referring to entry no., in Gay's personal journal, dated 1843 and noting the Coquimbo, Chile TL], Museum Paris, Chili [sic], Gay 1843". Note: syntype referenced

above was first located by G. Bernardi (pers. comm. dated 25 January 1983) but its location subsequently unknown until 1989 when it was found with the Godart types. Since it lacked an abdomen, the lectotype (Fig. 28, FWL = 12 mm) was designated from another syntype located by me in 1985 with abdomen still intact (Johnson et al. 1990). Both original syntypes are now segregated with the Godart material under the care of J. Pierre as above noted.

#### Recent Authors

MNHN is depository for an increasing number of primary types of this author. These are listed in Johnson et al. (1988, 1990) and Johnson (1989a, 1989b; 1990a, 1990b, 1991) and are located in two drawers of the cabinets facing the west wall in the room directly west of the Fournier room. These drawers have an external label "Neotropical Type Specimens of Dr. Kurt Johnson".

## **Supplemental Collection**

No Neotropical Thecline types are apparent in the supplemental collections in the two rooms consecutively west of the Fournier room (the rooms most likely for incorporation of Neotropical butterflies on an "as is" basis). This includes the collections attributed to Doubles, Herbulot, Stempffer, and Zerkowitz. I have examined the contents of these collections on three separate occasions.

#### DISCUSSION

Of MNHN types, those of P. I. Lathy are most straightforward and easiest to evaluate. Regarding Neotropical Theclinae, Lathy (1926, 1930, 1936) (with the exception of *Thecla ambrax septentrionalis*) indicated species were described from the Fournier Collection. Types from Lathy (1904) have been documented at the NHM (personal examination and Bridges 1988). Confusion can arise concerning Lathy names in cases where he proposed the same specific name in various genera (Bridges 1988) but did not specify more than a specific name on the type label. Unfortunately, such labels were placed on some specimens for which names were never published. Because some of this undescribed material represents significant species additions to various groups of Eumaeini, I plan to describe the taxa that can be assigned to genera recently revised.

It appears that types of three Lathy taxa described from the Fournier Collection still have not been located: *Thecla obsoleta* Lathy 1926, *T. janthina venezuelae* Lathy 1930, and *T. angusta* Lathy 1936. As several Lathy types were located in the farflung Fournier holdings as late as 1989, it is probable that these types are extant and eventually will be found.

In the four instances of MNHN types attributed to Draudt, authen-

ticity initially appeared questionable because of published reports that most of these types had been destroyed in World War II (Kiriakoff 1948, Bridges 1988). However, in 1991 G. Lamas (pers. comm.) located many of the "missing" Draudt types and, from their data and consideration of known purchase sources of Fournier material, concluded that MNHN types attributed to Draudt are apparently genuine.

Other MNHN specimens marked as types of various authors appear to be invalid. Those attributed to Druce, Hewitson, or Staudinger were readily assessed as inauthentic because data did not match OD's and because types of these taxa were already well-documented from other institutions. G. Lamas (pers. comm., 1991) suggests that some Theclinae types of Embrik Strand and Wilhelm Niepelt also may be at the MNHN. In my examinations of the respective Fournier and General collections, I did not find any purported types of these authors marked either with MNHN green type labels or Lathy "voucher" type labels. However, it is possible such specimens may be in either collection but not specifically marked as types.

#### **ACKNOWLEDGMENTS**

G. Bernardi and Jacques Pierre (MNHN) provided invaluable assistance and hospitality while I was in Paris. Dr. Bernardi reviewed an initial draft of this paper and, later, worked with me on the specific questions and comments posed by other reviewers. These latter included Charles A. Bridges (University of Illinois, Urbana, who kindly reviewed my initial draft in relation to his computer data base on Neotropical Eumaeini) and William E. Miller (former Journal editor), Robert K. Robbins (National Museum of Natural History) and J. N. Eliot (Taunton, United Kingdom) who made particularly helpful review comments. Also, Frederick H. Rindge and Eric L. Quinter (American Museum of Natural History) reviewed preliminary drafts. Jacqueline Y. Miller (Allyn Museum of the Florida Museum of Natural History, Sarasota (AME)), Philip Ackery (NHM), and Eliot answered particular questions concerning types at the NHM. An extremely helpful review of a final draft was made by Gerardo Lamas (Museo de Historia Natural, Lima, Peru); any errors in incorporation of his comments are mine. At Paris, Jacques Pierre and Madame Pierre patiently helped match keys to cabinets during successive searches of stored Fournier material. Lorraine Hitz provided the specimen photographs. J. R. Pigott translated some comments and questions of reviewers into French for use at MNHN. Lee D. Miller (AME), Bridges, and Rindge responded to questions concerning the final draft.

#### LITERATURE CITED

BLANCHARD, C. E. 1852. Lepidoptera, pp. 1–468. *In Gay*, C., Historia fisica y politica de Chile. Vol. 7. Privately printed, Paris & Santiago. 468 pp.

BRIDGES, C. A. 1988. Catalogue of Lycaenidae & Riodinidae (Lepidoptera: Rhopaloc-

era). Privately printed, Urbana, Illinois. 811 pp.

COMSTOCK, W. P. & E. I. HUNTINGTON. 1958-64. An annotated list of the Lycaenidae (Lepidoptera—Rhopalocera) of the western hemisphere. J. N.Y. Entomol. Soc. [1958] 66:103-118; [1959] 67:59-95, 163-212; [1960] 68:49-62, 105-122, 176-186, 232-240; [1961] 69:4-58, 105-118, 157-176, 191-200; [1962] 70:39-46, 100-118, 177-179; [1963] 71:45-57, 115-119, 189-197, 262-264; [1964] 72:62-64, 120-130.
COWAN, C. F. 1967. Enc. meth. 9. J. Soc. Bibliog. Nat. Hist. 4:307.

Draudt, M. 1917-24 [1920, 1921]. Thecla, pp. 794-811 [1920] and Addended Notes,
 p. 825 [1921]. In Seitz, A., Macrolepidoptera of the world. Alfred Kernen Verlag,
 Stuttgart. [1920-1921] Vol. 5, pp. 593-1139, [1920] Vol. 5 (plates), 194 pls.

DRUCE, H. H. 1909. On some new and little-known Neotropical Lycaenidae. Trans.

Entomol. Soc. Lond. 57:431-438.

EDWARDS, W. H. 1862. Descriptions of certain species of diurnal Lepidoptera found within the limits of the United States and British America—No. 3. Proc. Acad. Nat. Sci. Philad. 14:221–226.

ERSCHOFF, N. G. 1874. Lepidoptera, pp. 1–127. In Fedchenko, Aleksyei Pavlovich, Reise in Turestan [sic] (1874–1899). Mem. Soc. Amis Sci. nat. Moscou 11(2):[vi]–134.

FABRICIUS, J. C. 1792–99 [1793]. Entomologia systematica emendata et aucta, secundum classes, ordines, genera, species, adjectis synonymis, locis, observationibus, descriptionibus. Gottl. Proft, Copenhagen. p. 270 of Vol. 3(1) [1793], 488 pp.

FIELD, W. D. 1967. Preliminary revision of butterflies of the genus Calycopis Scudder

(Lycaenidae: Theclinae). Proc. U.S. Nat. Mus. 119 (3552): 48 pp.

GODART, J. B. 1819–24 [1824]. [1824] pp. 632, 633, 638, 640, 674, 681. In Latreille, P. A. & J. B. Godart. Encyclopédie méthodique, Histoire naturelle des insectes. Vol. 9 and supplement. Privately printed, Paris. [1824] Godart prepared text pages 329–end (p. 828) [Cowan 1967].

GEYER, C. M. 1832–37 [1837]. Vol. 5, p. 42. In Hübner 1808–1837 [1837]. Zuträge zur Sammlung Exotischer Schmettlinge. Privately printed, Augsburg. [Vol. 5 attributed

to Geyer (see Bridges 1988)]. 52 pp.

HEWITSON, W. C. 1863–78 [1867]. Îllustrations of diurnal Lepidoptera, Lycaenidae. Supplement. John van Voorst, London. p. 87 [1867] Suppl., pp. 77–114; pl. 34 [1867] pls. 31–46.

HÜBNER, J. 1816–26 [1819]. Verzeichniss bekannter Schmettlinge. Privately printed, Augsburg. p. 74, entry 732 of [1819] (see Bridges 1988), pp. 17–176.

JOHNSON, K. 1989a. Revision of Chlorostrymon Clench and description of two new

——— 1990a. The new hairstreak butterfly genus Orcya, a revision of the Neotropical

"Thecla" orcynia assemblage. J. N.Y. Entomol. Soc. 98:50–87.

1990b. Penaincisalia, a new genus of "elfin"-like butterflies from the high Andes

(Lepidoptera: Lycaenidae). Pan-Pacific Entomol. 66:97-125.

Reports Mus. Nat. Hist., Univ. Wisc. (Stevens Point) 21:1–127.

JOHNSON, K., R. C. EISELE & B. MACPHERSON. 1988. The "hairstreak butterflies" (Lycaenidae, Theclinae) of northwestern Argentina. I. Introduction, Calycopis, Cal-

ystryma, Tergissima & Femniterga. Bull. Allyn Mus. 123:1-49.

——— 1990. Ibid. op. cit., II. Strymon sensu stricto. Bull. Allyn Mus. 130:1-77.

KIRIAKOFF, S. G. 1948. A report on the war damage to Lepidopterology in Europe. Lepid. News 2(5):49.

LAMAS, G. 1973. The type-material of Lepidotera Rhopalocera contained in the collections of the Museu de Zoologia da Universidade de São Paulo. Papéis avulsos Dept. Zool., São Paulo 26(13):179–185.

LATHY, P. I. 1904. A contribution towards the knowledge of the Lepidoptera-Rhopalocera of the Dominica, B.W.I. Proc. Zool. Soc. London 1904(2):450–454.

— 1926. Notes on the American Theclinae (Lepidoptera). Ann. Mag. Nat. Hist.

17(9):35–47.

1932. The genus Lamprospilus (Lepidoptera). Ann. Mag. Nat. Hist. 10(9):180-182.

- 1936. Thecla nouveaux d'Amérique de Sud (Lepidopt. Lycaenidae), pp. 229-232. In M. Eugene-Louis Bouvier, Livre jubilaire de M. Eugene-Louis Bouvier. Firmin-Didot, Paris. 379 pp.

MARCHANT, J. R. V. & J. F. CHARLES. 1956. Cassell's Latin Dictionary. Funk & Wagnalls,

New York, 927 pp.

MILLER, L. D. & F. M. BROWN. 1981. A catalogue/checklist of the butterflies of America north of Mexico. Mem. Lepid. Soc. 2. 280 pp.

MORRIS, J. G. 1860. Catalogue of the described Lepidoptera of North America. Smithson.

Misc. Publ., Washington. 68 pp.

NICOLAY, S. S. 1971. A new genus of hairstreak from Central and South America (Lycaenidae, Theclinae). J. Lepid. Soc. 25 (suppl. 1):1-39.

- 1982. Studies in the genera of America Hairstreaks. 6. A review of the Hübnerian

genus Olynthus (Lycaenidae: Eumaeini). Bull. Allyn Mus. 74:30 pp.

NIEPELT, W. 1914. Neue formen palaearktischer Rhopalocera. Int. ent. Z. 8(26):144-145.

ROBBINS, R. K. 1986. Evolution and identification of the New World Hairstreak Butterflies (Lycaenidae: Eumaeini): Eliot's Trichonis Section and Trichonis Hewitson. I. Lepid. Soc. 40:138–157.

STAUDINGER, O. 1884-88. Exotische Tagfalter, Theil I. In Staudinger, O. & E. Schatz (eds.), Exotische Schmetterlinge. G. Löwensohn, Fürth (Bayern). [Band 1, Beschreib-

ungen], 333 pp. [Band 2, Abbildungen], 100 pls.

STOLL, C. 1780-90 [1782]. p. 208, pl. 390 [Vol. 4]. In Cramer, P. De uitlandische Kapellen, voorkomende in de drie Waereld-Deelen Asia, Africa en America. Amsterdam, Baalde & Utrecht, Wild. [Vol. 4 onwards completed by Stoll; pages not sequentially numbered (Bridges 1988)]. [Vol. 4], 136 pp.

U.S.B.G.N. [UNITED STATES BOARD ON GEOGRAPHIC NAMES]. 1961-68 [1961a, 1961b, 1961c; 1964, 1968]. Gazetteer. U.S. Government Printing Office, Washington, D.C. [1961a] Venezuela, 245 pp.; [1961b] Peru, 609 pp.; [1961c] Mexico, 749 pp.; [1964]

Colombia, 396 pp.; [1968] Argentina, 699 pp.

VERITY, R. 1911. Alcuni Lepidoptteri inediti o non ancora figurati. Boll. Soc. Entomol. Ital. 42:266-281.

Received for publication 18 November 1987; revised 10 August 1989 and 23 June 1990; revised and accepted 3 June 1991.